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# PLANT IMMIGRANTS.

No. 181. MAY, 1921.

GENERA REPRESENTED IN THIS NUMBER.


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Foreign Seed and Plant Introduction.

# EXPLANATORY NOTE.

This multigraphed circular is largely made up from notes received from agricultural explorers, foreign correspondents, cooperators, and others, relative to the more important plants which have recently been received by the Office of Foreign Seed and Plant Introduction of the Department of Agriculture; in it are also contained accounts of the behavior in America of plants previously introduced. Descriptions appearing here are revised and published later in the Inventory of Seeds and Plants Imported.

Applications from experimenters for plants or seeds described in these pages may be made to this Office at any time. As they are received the requests are placed on file and when the material is ready for the use of experimenters it is sent to those who seem best situated and best prepared to care for it. The plants or seeds here described (except such as are distributed direct or are turned over to specialists in the Department who are working on investigational problems) are propagated at our Plant Introduction Field Stations; and when ready to be distributed are listed in our annual check lists, copies of which are sent to experimenters in the late fall. It is not necessary, however, to await the receipt of these lists should one desire to apply for plants which are described herein.

One of the objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant breeders and experimenters. Every effort will be made to fill specific requests for experimental quantities of new or rare foreign seeds or plants.

David Fairchild

*Agricultural Explorer in Charge,*
*Office of Foreign Seed and Plant Introduction.*

Issued May 31, 1921. Washington, D.C.

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*Acacia pendula* (Mimosaceae), 52800. From Sydney, New South Wales. Seeds presented by Mr. George Valder, director of Agriculture. One of the most beautiful of all the Australian Wattles is this "Boree" of the aborigines, generally known among stockmen as "Myall" and "Weeping Myall." It is a handsome evergreen tree, attaining sometimes a height of 35 feet, and growing more or less abundantly over large areas in the interior. It gives quite a distinct character to some parts of the country, and few inland trees have a more ornamental and attractive appearance. The lance-shaped, silver-gray leaves (phyllodes) are 2 to 5 inches long; and both sheep and cattle are so partial to them that one may travel for days in a country where these animals are pastured and rarely see a young tree, as the seedlings are eaten as soon as they are well above the ground. In very dry seasons the "Myall" is often cut down and fed to sheep and cattle, particularly the former, and they seem to thrive on it. (Adapted from Pastoral Finance Association Magazine, vol. 5, No. 19, p. 131.)

*Aesculus indica* (Aesculaceae), 52625. From Elstree, Herts, England. Plants presented by Hon. Vicary Gibbs. A tree 100 feet high, found at altitudes of 8,000 to 10,000 feet in northern India and flowering the latter part of June when the other horsechestnuts have finshed. The rich luxuriant foliage is shining green; and the dainty white flowers which are borne in fairly dense racemes have the two small upper petals heavily blotched with yellow changing to orange-red, and the lower petals tinged with pink. (Adapted from The Garden, vol. 76, p. 376; and Gardening Illustrated, vol. 39, p. 405.)

*Callitris whytei* (Pinaceae), 52807. From Mount Silinda, Melsetter, Southern Rhodesia. Seeds presented by Mr. W. L. Thompson, American Board of Missions. "Native cypress of this region. These seeds are from trees in our own grounds." (Thompson.)

The "Milanji cypress" was originally found at an altitude of 10,000 feet, on Mount Milanji, in Nyasaland, by Mr. Alexander Whyte. It is a magnificent tree reaching a height of 140 feet, sometimes with a clear straight stem for 90 feet and a diameter of 5 1/2 feet at 6 feet from the base. The pistillate cones, crowded 4 to 6 together on a short lateral shoot, are subglobose and about 1 inch wide when open. The staminate cones are solitary and terminal. The pale reddish

timber is of excellent quality and easily worked. The bark on old trees is of great thickness, consisting of layers annually shed and renewed. These fine trees are rapidly disappearing before the forest fires, only those in damp gorges surviving. (Adapted from Transactions of the Linnean Society, 2d ser., vol. 4, p. 60; and Gardeners' Chronicle, 3d ser., vol. 37, p. 18.)

*Clematis montana rubens* (Ranunculaceae), 52630. From Elstree, Herts, England. Plants presented by Hon. Vicary Gibbs. Said to be a splendid, spring-flowering climber which will grow anywhere. It is perfectly hardy and a very free grower, ascending 15 feet in one season. The profuse, soft rosy red flowers are 2 to 3 inches across.

*Clematis tangutica* (Ranunculaceae), 52631. From Elstree, Herts, England. Plants presented by Hon. Vicary Gibbs. Reported as a superb species 10 to 16 feet high, closely related to *Clematis orientalis*, with foliage equally glaucous, producing in July large, bright yellow, very abundant flowers with long-pointed petals. The fruit forms silvery, plumelike, very decorative tassels.

*Corypha umbraculifera* (Phoenicaceae), 52802. **Palm.** From Burma. Seeds collected by Mr. J. F. Rock, Agricultural explorer. "'Talipot palm.' From Monywa, Upper Chindwin River, Burma.

"The 'Talipot palm' is one of about five species belonging to the genus Corypha. It has a ringed trunk, generally remarkably straight and reaching a height of over 80 feet. Its leaves are of gigantic size,- possibly the largest fan leaves of all palms. The petiole is 7 feet long and armed with spines on the margins. The blade is about 6 feet long and 16 feet broad with segments numbering from 95 to 100; these are again bilobed. The flowers are white to cream-colored and are borne in huge terminal panicles often 20 feet long; the tree flowers but once, after which it dies. The fruit is a roundish, one-seeded drupe.

"This enormous palm is a native of Ceylon and the Malabar Coast but is now cultivated in most tropical countries. The flowering time begins usually in June, and the seeds ripen about nine or ten months afterwards. Each tree has a spread of about two hundred square feet.

"The leaves of this palm are made into fans, mats,

and umbrellas; the segments were used by the Cinghalese to write on. The sacred Pali texts of the Buddhist literature of Ceylon are all written on these leaf segments which are supposed to have withstood the ravages of ages.

"The seeds, which are hard like ivory, are employed in India for the manufacture of beads; they are sometimes colored red and sold as coral. The pith of the trunk yields a kind of sago; it is beaten to flour and baked in cakes." (Rock.)

*Flindersia maculosa* (Meliaceae), 52798. From Sydney, New South Wales. Seeds presented by Mr. George Valder, director of agriculture. In the opinion of many experienced growers the "Leopard tree" or "Spotted tree" stands next in value to the "Kurrajong" as a fodder tree. It grows from 30 to 45 feet high or more, and its trunk is curiously spotted, hence its popular names. From the trunk and larger branches exude large quantities of amber-colored gum of a pleasant flavor. The "Leopard tree" is found growing over immense tracts of country in the interior of New South Wales. Its smaller branchlets have a somewhat pendulous habit, which gives a well-grown specimen a decidedly ornamental appearance. During very dry periods this tree is cut down for stock feed, sheep being particularly fond of its leaves and thriving on them. (Adapted from Pastoral Finance Association Magazine, vol. 5, No. 13, p. 33.)

*Juglans intermedia vilmoreana* (Juglandaceae), 52681. **Walnut.** From Paris, France. Plants presented by Vilmorin-Andrieux & Co. A tree 80 feet high, possibly a hybrid between the European and American black walnut, with branches more upright than those of the European walnut, grayish bark, and bronze-colored young shoots. The buds are inclosed in fleshy hairy scales. The fruit is intermediate between that of the two parents. The slightly coriaceous, smooth, dark green, ovate leaflets remain on the branches until killed by frost. The fruit is not produced every year, and never in large quantities; it is smaller and the nut is more deeply furrowed than that of the European species. The seed germinates well and produces plants resembling the parent. (Adapted from Garden and Forest, vol. 4, p. 52.)

*Mangifera indica* (Anacardiaceae), 52668. **Mango.** From Honolulu, Hawaii. Plants and cuttings presented by Mr. Willis T. Pope, Horticulturist, Agricultural Experiment

Station. "'Pirie.' This is considered the best, at least for lowland conditions, of all the mangos that have been introduced into Hawaii. It is of medium size, inclining to the rounded form, with a distinct beak at the stigmatic point. The surface is smooth and, when ripe, pale yellow, beautifully marked with crimson where exposed to the sun. It is practically fiber free, has a delightful aroma, and is as soft and juicy as a ripe peach. The seed is easily removed, so that the fruit can be served in halves and eaten with a spoon without the slightest inconvenience. In order to remove the seed, it is only necessary to make a cut circling the fruit, about midway its length, and extending as deep as the surface of the seed. Then, by a slight twisting motion, one half of the fruit can be separated from the seed, leaving a smooth, unbroken surface within. By cutting very slightly around the seed, it may easily be removed from the remaining half of the mango. The flavor is so unusually delicious as to put this mango in a class of its own in Hawaii. The 'Pirie' is less subject than other varieties to the black spots caused by the fungus *Colletotrichum gloeosporioides*, and, while not immune to the fruit fly attacks, it either possesses a high degree of resistance or is not a preferred variety for the fly. No injured fruits were found on this variety in the Station orchards this season, though crops of several of the other varieties were rendered almost worthless." (Westgate, Report of the Hawaii Agricultural Experiment Station, 1919, p. 13.)

*Rosa beggeriana* (Rosaceae), 52458. **Rose.** From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. A bush 1 to 2 1/2 m. tall, with evenly prickly, pinnate leaves,- the leaflets usually 7 to 9, elliptic to oblong, smooth and deep green above, generally thickly hairy and bluish green below. The inflorescences are 1 to nearly 50 flowered; the flowers are white, cream, or more rarely red. The fruits are very dark red. (Adapted from Schneider, Illustriertes Handbuch der Laubholzkunde, vol. 2, p. 572.)

*Sorbus trilobata* (Malaceae), 52600. From Paris, France. Cuttings presented by Prof. Georges Poirault, Université de Paris, Ecole Superieure de Pharmacie. "Cuttings of a tree growing at the Villa Thuret (but originally from Syria), which is a rather rare but very interesting ornamental, being covered in the spring with large white flowers, and in autumn maturing fruits which make

excellent preserves. A Syrian friend of mine tells me that in his country this tree is very popular." (Poirault.)

*Spiraea myrtilloides* (Rosaceae), 52459. From Paris, France. Seeds presented by Vilmorin-Andrieux & Co. A graceful shrub 2 to 3 m. high and excessively spreading. The young branches are chestnut or fuscous-brown and glabrous. The numerous short spurs, densely covered with the persistent fulvously pubescent budscales and bases of the petioles, give to the two and three-year-old branches a peculiar appearance. The somewhat papery oval leaves are entire, cuneate at the base, glabrous and obscurely bluish green above, paler and laxly pilose beneath. The umbellate, hemispherical racemes are densely many flowered and are borne at the tips of short few-leaved branches. The white flowers, 5 to 6 mm. in diameter, are on graceful pedicels 3 to 6 mm. long. Native to upland thickets at altitudes of 3,000 to 4,000 m. in western Szechwan. (Adapted from Sargent, Plantae Wilsonianae, vol. 1, p. 440.)

*Triticum aestivum* (Poaceae), 52557. **Wheat**. From Cowra, New South Wales. Seeds presented by Mr. J.T. Pridham, plant breeder, Experimental Farm, through Mr. J. A. Clark, U. S. Department of Agriculture. "Wheat No. 24 (A8), pure-line selection of 'Hard Federation.'"(Clark).

An early spring wheat, - short, with strong white straw and erect dense awnless spikes with small hard vitreous white kernels which are very attractive and doubtless would attract buyers and bring a premium over other white wheats on American markets, as is the case in Australia. The plant has the general appearance of 'Federation' in the field but differs in being slightly taller and earlier, in having a square and shorter spike, broader and squarer shoulders, and shorter, rounder, and harder kernels. The variety 'Hard Federation' has been grown commercially in Australia since 1914. During the past few years it has replaced the 'Federation' variety in many sections because of equal yield and better milling quality of grain. (Adapted from Australian Wheat Varieties in the Pacific Coast Area, U. S. Department of Agriculture Bulletin No. 887, p. 11.)

*Viburnum sieboldii* (Caprifoliaceae), 52689. From Paris, France. Plants presented by Vilmorin-Andrieux & Co. A widespreading shrub from Japan, sometimes reaching a

height of 10 to 15 feet. If the leaves are bruised or crushed in the hand the odor is anything but agreeable, but otherwise it is not noticeable. The flowers, in large flat clusters, are cream colored, or almost white, and borne in moderate-sized heads during June. In August the fruit clusters assume a rich crimson color and are very conspicuous and ornamental, but in September they turn black and soon drop. (Adapted from Gardening Illustrated, vol. 39, p. 405.)

**Notes on Behavior of Previous Introductions.**

Mr. Andrew Phelan, Oklahoma City, Okla., writes January 18, 1921:

"The Aztec breakfast food (*Amaranthus paniculatus*, S. P. I. No. 45811), of which you sent me two small packages in January and March, 1920, is a great success. I raised about 75 quarts from the two small packages. It is easily raised and not affected by dry weather. Two jars of it won first premium here at the State Fair in September. The seeds are delicious cooked like rice and eaten with cream and sugar. It is a keenly relished, nourishing dish for breakfast or any other meal and in my opinion better than all other breakfast foods combined. Every one who has eaten this food recommends it; it should be grown all over the United States. The plant has an extensively branching habit, so that, for large seed production, the seed should be sown 12 inches apart in rows 3 feet apart. One acre so planted would probably yield 80 to 90 bushels."

Mr. W. H. Replogle, Hagerstown, Indiana, writes April 20, 1921:

"*Cornus bretschneideri*, S.P.I. No. 36741, sent to me February, 1915, is now 4 feet high with a 4-foot spread. The young twigs which are red in winter later become greenish red. The flat heads of greenish white bloom are followed by berries which the birds did not let ripen. The shrub is too open in growth to suit our fancy, but is surely a good one to attract birds.

"One of the best things we have received from you is *Prunus tomentosa*, S.P.I. No. 36111, sent here February, 1915. It is 5 feet high with a spread of 2 1/2 feet. We consider it a very fine shrub both for the foliage and bloom, to say nothing about the fruit. Last year I crossed some of the bloom and obtained seven hybrid seed."

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY
OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION
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